



U.S. Department
of Transportation

**Research and
Special Programs
Administration**

**IAEA CERTIFICATE OF COMPETENT AUTHORITY
SPECIAL FORM RADIOACTIVE MATERIALS
CERTIFICATE NUMBER USA/0523/S, REVISION 0**

400 Seventh Street, S.W.
Washington, D.C. 20590

This certifies that the source described has been demonstrated to meet the regulatory requirements for special form radioactive material as prescribed in the regulations of the International Atomic Energy Agency¹ and the United States of America² for the transport of radioactive materials.

1. Source Identification - JL Shepherd 7810-484-1
2. Source Description - The type 304 stainless steel, double encapsulation has outer dimensions of 19.05mm (0.750 in) in diameter by 169.7mm (6.68 in) long. The inner capsule is 13.4mm (0.527 in) in diameter by 161.3mm (6.380 in) long. End plugs on both capsules are sealed by Tungsten Inert Gas welds. The thickness of the outer wall is 2.1mm (0.083 in) and the thickness of the inner wall is 1.24mm (0.049 in). Source capsule will be manufactured in accordance with J.L. Shepherd Drawing No. A-0484-3245-2, and shall be engraved with information as specified on the drawing.
3. Radioactive Contents - Not more than 244 TBq (6600 Ci) Co-60 in the form of solid metal.
4. Quality Assurance - Records of Quality Assurance activities required by Paragraph 209 of the IAEA regulations¹ shall be maintained and made available to the authorized officials for at least three years after the last shipment authorized by this certificate. Consignors and consignees in the United States exporting or importing shipments under this certificate shall satisfy the requirements of Subpart H of 10 CFR 71.
5. Expiration Date - This certificate expires January 31, 2002.

¹ "Safety Series No. 6, Regulations for the Safe Transport of Radioactive Materials, 1985 Edition, as amended 1990", published by the International Atomic Energy Agency (IAEA), Vienna, Austria.

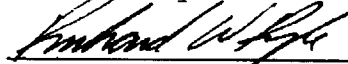
² Title 49, Code of Federal Regulations, Parts 100 - 199, United States of America.

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CERTIFICATE USA/0523/S, REVISION 0

This certificate is issued in accordance with paragraph 703 of the IAEA Regulations and Section 173.476 of Title 49 of the Code of Federal Regulations, in response to the petition and information dated September 27, 1996 and December 27, 1996 submitted by JL Shepherd and Associates, San Fernando, CA, and in consideration of other information on file in this Office.

Certified by:



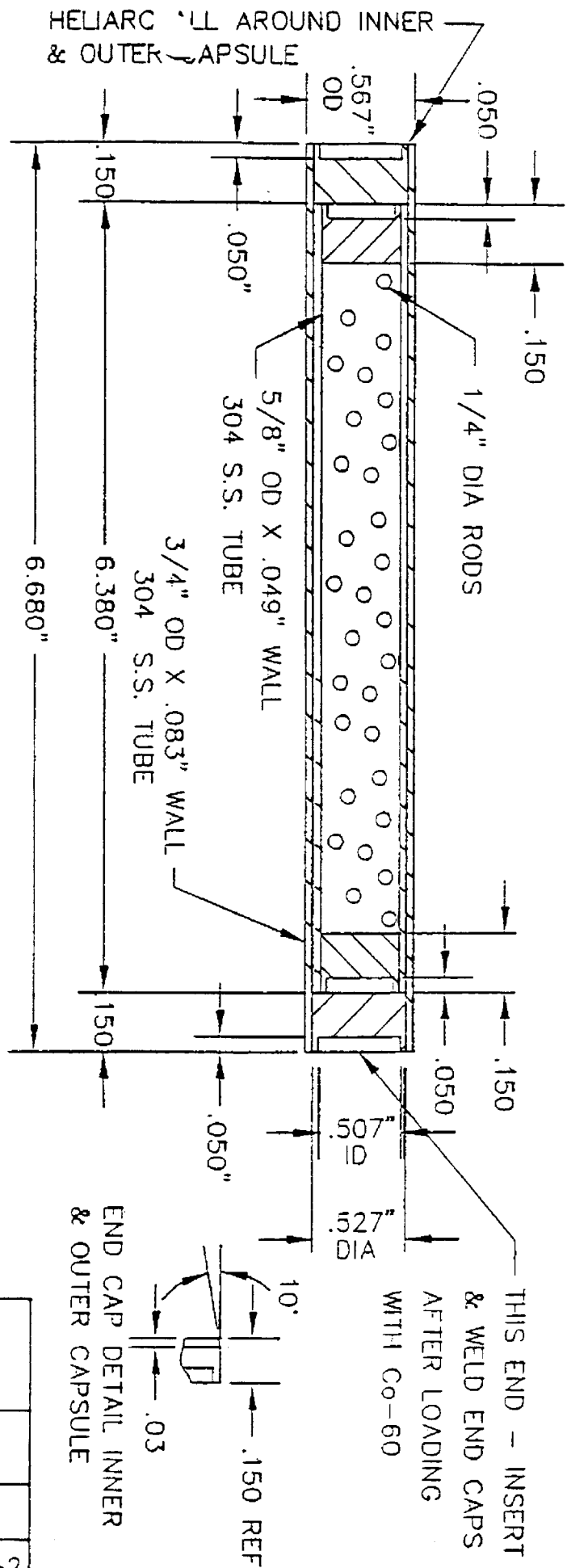
for Alan I. Roberts

Associate Administrator for Hazardous Materials Safety

MAR - 3 1997

(DATE)

Revision 0 - Original issuance.



NOTE:

1. HELICARC - ALL AROUND BOTH ENDS
 2. END CAPS - 304 S.S.
 3. SOURCES CERTIFIED "SPECIAL FORM"
 4. END CAPS HAVE .002 REGISTER
 5. BEFORE LOADING, 1 END OF EA. TUBE WELDED & HEL. LEAK TESTED TO SENSITIVITY OF 1×10^{-8} CC/MIN
 6. REMOVEABLE CONTAMINATION (LEAK TEST) AFTER LOADING $\leq 5 \times 10^{-3}$ MCI
 7. SCRIBE / ENGRAVE 3/32" HIGH LETTERS:
JLS 7890-484-1 CI Co-60
- S/N _____ DATE _____

J. L. SHEPHERD and Associates

DRAWN BY TRAN	DATE 09-10-96	APPROVED BY <i>[Signature]</i>	SCALE NONE
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SOURCE CAPSULE FOR MODEL 7810-484-1

A-0484-3245-2